# GOODWE

# **ET** Series

15-29.9 kW I Three phase I Up to 3 MPPTs Hybrid Inverter (HV)

The GoodWe ET 15kW-29.9kW Series inverter is ideal for residential, small to medium commercial and industrial applications. As the core of an energy storage solution, the ET inverter massively lowers energy costs by efficiently storing the solar power for flexible use and increasing self-consumption. Peak shaving balances power demand and grid power imported, to effectively reduce extra grid demand for the most cost-effective use for your property. When paired with the GoodWe Home F Series battery, this offers a one-stop shop solution for Three Phase systems. This series is available in 15kW, 20kW, 25kW and 29.9kW models.



## Friendly & Thoughtful Design

- · Elegant and compact design
- · Plug & Play installations



### Superb Safety & Reliability

Smart Control & Monitoring

· Integrated dry contact for external loads

- · Type II SPD on DC side
- · AFCI optional1

· Peak shaving



### Flexible & Adaptable Applications

- · Max 15A DC input current per string
- · Up to 200% DC input oversizing



| Technical Data  | GW15K-ET                          | GW20K-ET  | GW25K-ET   | GW29.9K-E       |
|---|-----------------------------------|---|--|-----------------|
| Battery Input Data  |                                   |   |  |                 |
| Battery Type  |                                   |   | lon  |                 |
| Nominal Battery Voltage (V) Battery voltage range (V)   | 500                               |   |  |                 |
| Start-up Voltage (V)  | 200 ~ 800<br>200                  |   |  |                 |
| Number of Battery Input   | 1                                 | 1   | 2  | 2               |
| Max. Continuous Charging Current (A)  | 50                                | 50  | 50 × 2   | 50 × 2          |
| Max. Continuous Discharging Current (A) Max. Charging Power (W)   | 50<br>15000                       | 50<br>20000   | 50 × 2<br>25000  | 50 × 2<br>30000 |
| Max. Discharging Power (W)  | 15000                             | 20000   | 25000  | 30000           |
| PV String Input Data  |                                   |   |  |                 |
|   |                                   |   |  |                 |
| Max, Input Power (W)*1 Max, Input Voltage (V)*2   | 30000                             | 40000   | 50000  | 59800           |
| MPPT Operating Voltage Range (V)**  | 200 ~ 850                         |   |  |                 |
| Start-up Voltage (V)  | 200                               |   |  |                 |
| Nominal Input Voltage (V)   | 620<br>30                         |   |  |                 |
| Max. Input Current per MPPT (A)  Max. Short Circuit Current per MPPT (A)  |                                   | 38  |  |                 |
| Number of MPP Trackers  | 2                                 | 2   | 3  | 3               |
| Number of Strings per MPPT  | 2/2                               | 2/2   | 2/2/2  | 2/2/2           |
| AC Output Data (On-grid)  |                                   |   |  |                 |
| Nominal Output Power (W)  | 15000                             | 20000   | 25000  | 29900           |
| Nominal Apparent Power Output to Utility Grid (VA)  | 15000                             | 20000   | 25000  | 29900           |
| Max. Apparent Power Output to Utility Grid (VA)*3*9   | 16500                             | 22000   | 27500  | 29900           |
| Max. Apparent Power from Utility Grid (VA)*7  Nominal Output Voltage (V)  | 15000                             | 20000   | 25000  | 30000           |
| Output Voltage Range (V)  | 380 / 400, 3L / N / PE<br>0 ~ 300 |   |  |                 |
| Nominal AC Grid Frequency (Hz)  | 50 / 60                           |   |  |                 |
| AC Grid Frequency Range (Hz)  |                                   |   | ~ 65   |                 |
| Max. AC Current Output to Utility Grid (A)  Max. AC Current From Utility Grid (A)*8   | 23.9<br>21.7                      | 31.9<br>29.0  | 39.9<br>36.2   | 43.3<br>43.3    |
| Nominal Output Current (A)  | 22.7                              | 30.3  | 37.9   | 45.3            |
| Power Factor  |                                   | ~1 (Adjustable from 0.  | 8 leading~0.8 lagging)   |                 |
| Max. Total Harmonic Distortion  |                                   | ≤3.0  | 05%  |                 |
| AC Output Data (Back-up)  |                                   |   |  |                 |
| Back-up Nominal Apparent Power (VA)   | 15000                             | 20000   | 25000  | 29900           |
| Max. Output Apparent Power without Grid (VA) <sup>-5</sup>  | 15000 (18000@60s, 24000@3s)       |   | 25000 (30000@60s)  | 30000 (36000@6  |
| Max. Output Apparent Power with Grid (VA)   | 15000                             | 20000   | 25000  | 29900           |
| Max. Output Current (A) Nominal Output Voltage (V)  | 22.7 (27.3@60s, 36.4@3s)          | 30.3 (36.4@60s, 48.5@3s)  | 37.9 (45.5@60s)<br>/ 400   | 45.5 (54.5@60s  |
| Nominal Output Fregency (Hz)  |                                   |   | / 60   |                 |
| Output THDv (@Linear Load)  |                                   |   | 3%   |                 |
| Efficiency  |                                   |   |  |                 |
| Max. Efficiency   |                                   | 98  | 0%   |                 |
| European Efficiency   | 97.5%                             |   |  |                 |
| Max. Battery to AC Efficiency   | 97.5%                             |   |  |                 |
| MPPT Efficiency   |                                   | 99.   | 9%   |                 |
| Protection  |                                   |   |  |                 |
| PV String Current Monitoring  | Integrated                        |   |  |                 |
| PV Insulation Resistance Detection  | Integrated                        |   |  |                 |
| Residual Current Monitoring   | Integrated                        |   |  |                 |
| PV Reverse Polarity Protection Battery Reverse Polarity Protection  | Integrated Integrated             |   |  |                 |
| Anti-islanding Protection   | Integrated                        |   |  |                 |
| AC Overcurrent Protection   | Integrated                        |   |  |                 |
| AC Short Circuit Protection   | Integrated                        |   |  |                 |
| AC Overvoltage Protection DC Switch   |                                   |   | rated<br>6-55P   |                 |
| DC Surge Protection   |                                   |   | pe II  |                 |
| AC Surge Protection   | Type III                          |   |  |                 |
|   |                                   | Opt   | onal   |                 |
| AFCI  |                                   |   |  |                 |
|   |                                   |   |  |                 |
| AFCI  |                                   | -35 ^   | +60  |                 |
| AFCI  General Data  Operating Temperature Range (°C)  Relative Humidity   |                                   | -35 ^<br>0 ~  | 95%  |                 |
| AFCI  General Data  Operating Temperature Range (°C)  Relative Humidity  Max. Operating Altitude (m)  |                                   | -35 ~<br>0 ~<br>40  | 95%<br>00  |                 |
| AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method   |                                   | -35 ^<br>0 ~<br>40<br>Smart Fa  | 95%<br>00<br>n Cooling   |                 |
| AFCI  General Data  Operating Temperature Range (°C)  Relative Humidity  Max. Operating Altitude (m)  |                                   | -35 ~<br>0 ~<br>40<br>Smart Fa<br>LED, WLD  | 95%<br>00  |                 |
| AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter  |                                   | -35 ^<br>0 ~<br>40<br>Smart Fa<br>LED, WL<br>RS485<br>RS  | 95%<br>00<br>n Cooling<br>AN + APP<br>// CAN<br>485                          |                 |
| AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal  |                                   | -35 ~<br>0 ~<br>40<br>Smart Fa<br>LED, WL.<br>RS485<br>RS<br>WiFi + LAN                         | 95%<br>00 n Cooling<br>AN + APP<br>// CAN<br>485<br>+ Bluetooth              |                 |
| AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg)  | 48                                | -35 ~<br>0 ~<br>40<br>Smart Fa<br>LED, WLJ<br>RS485<br>RS<br>WiFi + LAN                         | 95%<br>00 n Cooling<br>AN + APP<br>/ CAN<br>485<br>+ Bluetooth               | 54              |
| AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal  | 48<br><45                         | -35 ~<br>0 ~<br>40<br>Smart Fa<br>LED, WLJ<br>RS485<br>RS<br>WiFi + LAN                         | 95%<br>00 n Cooling<br>AN + APP<br>// CAN<br>485<br>+ Bluetooth              | 54<br><60       |
| AFCI  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology  |                                   | -35 -<br>0 ~<br>40<br>Smart Fa<br>LED, WL<br>RS485<br>RS<br>WiFi + LAN<br>48<br>520 × 64<br><45 | 95% 00 n Cooling AN + APP // CAN 485 + Bluetooth 54 50 × 220 solated         |                 |
| AFCI  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)'6  |                                   | -35 ^ 0 ~ 40 Smart Fa LED, WL RS485 RS WiFi + LAN 48 520 × 66 <45 Non-is                        | 95% 00 n Cooling AN + APP // CAN 485 + Bluetooth 54 50 × 220    solated   15 |                 |
| AFCI  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)*6 Ingress Protection Rating   |                                   | -35 ~ 0 ~ 40 Smart Fa LED, WL. RS485 RS WiFi + LAN 48 520 × 60 <45 Non-is                       | 95% 00 n Cooling AN + APP // CAN 485 + Bluetooth 54 60 × 220    < < 45       |                 |
| AFCI  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)'s Ingress Protection Rating Overvoltage Category |                                   | -35 ~ 0 ~ 40 Smart Fa LED, WL. RS485 RS WiFi + LAN 48 520 × 60 <45 Non-is                       | 95% 00 n Cooling AN + APP // CAN 485 + Bluetooth 54 50 × 220    solated   15 |                 |
| AFCI  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology Self-consumption at Night (W)°6   |                                   | -35 ^ 0 ~ 40 Smart Fa LED, WL RS485 RS WiFi + LAN 48 520 × 66 <45 Non-is   IP                   | 95% 00 n Cooling AN + APP // CAN 485 + Bluetooth 54 60 × 220    < < 45       |                 |

- \*1: Max. Input Power, not continuous for 1.5\*normal power.
  \*2: For 1000V system, Maximum operating voltage is 950V.
  \*3: According to the local grid regulation.
  \*4: Output Voltage Range: phase voltage.
  \*5: Can be reached only if PV and battery power is enough.
  \*6: No Roke up Output.
- \*6: No Back-up Output.

  \*7: When the load is connected to the inverter's backup port, the Max. Apparent Power from Utility Grid can reach to 22.5K for GW15K-ET, 30K for GW20K-ET,
- 33K for GW25K-ET, 33K for GW29.9K-ET, and 33K for GW30K-ET respectively.
- 33k for GW25k-E1, 33k for GW29k-E1, and 33k for GW30k-E1 respectively.

  \*8: When the load is connected to the inverter's backup port, the Max. AC Current From Utility Grid can reach to 34A for GW15k-ET, 45A for GW20k-ET, 50A for GW25k-ET, 50A for GW29k-ET, and 50A for GW30k-ET respectively.

  \*9: For Austria, Max. Output Power (W) is 15k for GW15k-ET, 20K for GW20k-ET, 25k for GW25k-ET, 29.9k for GW29.9k-ET, and 30k for GW30k-ET.

  \*1: Please visit GoodWe website for the latest certificates.

- \*: All pictures shown are for reference only. Actual appearance may vary.

  \*\*: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.